

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

- 1.(original) A method for detecting ALK tyrosine kinase activity, which comprises the following steps: i) incubating the ALK protein or a functional derivative thereof with a peptide substrate selected from SEQ ID N. 1 or 2 in conditions suitable for phosphorylation of the peptide; ii) detecting the phosphorylated peptide.
- 2.(original) A method according to claim 1, wherein the peptide has sequence SEQ ID N. 1.
- 3.(original) A method according to claim 1, wherein purified ALK protein or an ALK- containing preparation is used.
- 4.(original) A method according to claim 3, wherein said preparation is a cell lysate.
- 5.(original) A method according to claim 1, wherein said functional derivative contains the entire catalytic domain of ALK spanning residues 1116-1392 of ALK sequence.
- 6.(original) A method according to claim 5, wherein said functional derivative is a fragment of ALK protein extending from residue Leulo to Alla'.

7.(original) A method according to claim 6, which comprises the steps of : a) adhering a peptide of SEQ ID N. 1 or 2 to a solid phase; b) incubating the solid phase with said ALK fragment in conditions suitable for tyrosine phosphorylation; c) washing the solid phase; d) incubating the solid phase with an anti-phosphotyrosine antibody (primary antibody) in conditions suitable for antigen-antibody binding; e) washing the solid phase; f) incubating the solid phase with an enzyme-conjugated antibody (secondary antibody) recognizing the primary antibody in conditions suitable for the binding of primary and secondary antibodies, so that a ternary immune complex is formed; g) washing the solid phase ; h) measuring the enzymatic activity of the immune complex wherein the measured activity is proportional to the amount of tyrosine-phosphorylation.

8.(original) A method according to claim 7, wherein the enzyme conjugated to the antibody is Horse-Radish peroxidase.

9.(original) A method according to claim 7, wherein the enzymatic activity is detected by colorimetric reaction.

10.(currently amended) A method according to claim 1 ~~any previous claims~~, for the identification of compounds that modulate ALK tyrosine-kinase activity.

11.(original) A method according to claim 10, which comprises the steps of i) incubating ALK protein or a functional

derivative thereof with a peptide selected from SEQ ID N. 1 or 2 in the presence of a candidate compound (a) in conditions suitable for peptide phosphorylation; ii) detecting the phosphorylated peptide thus formed;

12. (currently amended) A method according to claim 10 ~~claims 10-11~~, wherein the ALK-modulating activity of the candidate compound is compared to that of a reference compound which is assayed under the same conditions as the candidate compound.

13. (original) A method according to claim 12, wherein the reference compound is staurosporine.

14. (original) A method according to claim 12, wherein the reference compound is a staurosporine derivative of general formula (I): wherein R1 and R2, independently of one another, are selected from halogen, preferably chlorine, phenyl or C1-C3 alkyl optionally substituted with one or more halogens; R3 is hydroxyl; R4 is hydroxyl or hydroxymethyl; R5 is C1-C3 alkyl, optionally halo-substituted, or benzyl.

15. (original) A peptide useful as ALK substrate selected from SEQ ID N. 1 or 2.

16. (original) A peptide according to claim 15, which is SEQ ID N. 1.

17. (currently amended) The use of a peptide according to claim 15 [[or 16]] for the determination of ALK tyrosine-kinase activity.

18. (original) The use of a compound of formula (1), as per claim 14, for the preparation of a medicament for the treatment of ALK-related tumors, especially anaplastic large cell lymphomas and non-Hodgkin lymphomas.

19. (currently amended) A kit for detecting ALK tyrosine-kinase activity according to claim 1 ~~claims 1-14~~, which comprises a peptide of SEQ ID N: 1 or 2 and an anti- phosphotyrosine antibody.

20. (currently amended) A kit according to claim 19, containing an additional component selected from reagents for colorimetric reactions, buffers, diluents, detergents, stabilizers, staurosporine or a derivative thereof ~~as per claim 14~~.